

# FLOUR FROM CANADA'S FAR NORTH WEST



CHRISTMAS 1907.

# Flour from Canada's Far North West

With Some Account of  
Wheat Growing and Flour Milling  
Ancient and Modern



Winnipeg  
Christmas, nineteen hundred and seven

71. 100

100

100

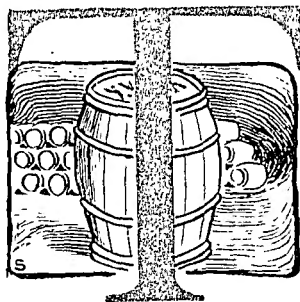
100

From the Presses of  
The Free Press Job Printing Department  
Winnipeg, Canada

09410272

## Flour from Canada's Far North West

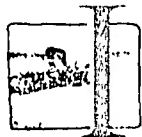
---



THE flour in the accompanying little barrel is made from wheat grown in the Peace River country. The Hudson's Bay Company's mill in which this flour was made is the northernmost mill on the continent. It is at Vermilion in the Peace River region, 700 miles due north of the United States boundary, 400 miles south of the Arctic Circle and 650 miles west from Hudson's Bay. The mill, which was built in 1902 and began grinding in the fall of that year, has a capacity of 35 barrels per day of twenty-four hours; it supplies flour to the northern posts of the Hudson's Bay Company which dot the basins of the Peace and Mackenzie Rivers. There is another flour mill in the same neighborhood belonging to the Roman Catholic Church. It is worthy of note that wheat grown in the Peace River region took the first prize at the World's Fair in

Chicago in 1893; still more remarkable is the fact that at the Centennial Exposition at Philadelphia in 1876 Red Fyfe wheat, grown in the same far end of the earth, as it was at that time regarded, was shown and received a special first prize. Fully twenty years ago several small stone mills were grinding wheat within a distance of 100 miles from Fort Vermilion, and more than two score years ago Roman Catholic and Anglican missionaries in that country were growing fine vegetables and some grain. At the Exhibition in Edmonton a couple of months ago, Mr. H. F. Lawrence showed a splendid collection of vegetables from his farm at Fort Vermilion, including pumpkins and cucumbers which had ripened on the vines; and Mr. H. Brick, M.P.P., of Peace River Crossing, cut his wheat this year ten days before wheat hundreds of miles to the southward was cut. Fort Vermilion is more than 1,800 miles northwest of Winnipeg\*. On its journey from the mill the accompanying sample of Peace River flour travelled first some 300 miles in a Hudson's Bay stern-wheel steamer down the Peace River to Lake Athabaska and across to the mouth of the Athabaska River, thence by the Athabaska River to Athabaska Landing, nearly 400 miles, in a York boat. It was then brought by pack train 100 miles to Edmonton, and from Edmonton it travelled 1,032 miles to Winnipeg. From Fort Vermilion to Minneapolis is 2,280 miles; to Chicago 2,690 miles; to St. Louis 2,864 miles; to Philadelphia 3,512 miles, to New York 3,603 miles.

\* Far as this flour has travelled, the diminutive barrel which brings it to you with all good wishes for Christmas from the Manitoba Free Press, has travelled farther, having come across the Atlantic from Stavanger, in Norway. It might be thought that little barrels of this sort, made of staves with wooden hoops and all complete, could be secured on this continent; but nearer than Norway the Free Press found it impossible to get them.



It is a far cry from the State of Ohio to the Peace River country. Yet less than fifty years ago it was believed that the western boundary of Ohio, which is less than one-fourth of the distance across the continent from the Atlantic coast, marked the limit of the wheat-producing area of North America. "The Wheat Plant," by John H. Klippart, was published in 1859. It is a book of some 700 pages. The portion of it published in the Ohio Agricultural Report for 1857 caused the entire edition of that Report to be absorbed in less than sixty days. Klippart was the Secretary of the Ohio State Board of Agriculture and a member of many learned societies. He was an authority on the subject of wheat; his book is still regarded as in many respects authoritative. He declared that the tide of population then moving westward "must soon return eastward to the wheat-producing region." But those indomitable conquerors of the soil whom he so confidently expected to see returning to the borders of Ohio, not only journeyed on beyond the Mississippi, but their sons and grandsons have for years been crowding across the international boundary and have pressed on as far into Western Canada from the boundary as their fathers journeyed from Ohio to Minnesota; and still the wheat springs up in their wake as it sprang up in the wake of their fathers. They are mingling with the sturdy sons of the men from Eastern Canada, who were the pioneers of Manitoba, and with the vigorous young blood from the older Provinces that is going into farther Western Canada. Homemakers from the old lands overseas, too, are pouring into the prairies and valleys of Canada's far North West. Yesterday a wilderness, to-day the abode of the pioneer, to-morrow a

waving field of grain! Such is the Epic of the Plough, which under the wide-arching heavens is being written across the vast expanse of fertile soil that stretches away westward from the valley of the Red River across the continent to the foothills of the Rockies and northward to the valley of the Peace River.



MORE wonderful, as it is more rapid, than the chapters that have gone before, is this latest chapter in the history of the advance of wheat-growing, which is the history of man's advance from primitive conditions. Wheat is flour, flour is bread, and bread is the daily food which man has been taught to pray for as the mainstay of his existence. Since the dawn of history wheat bread and civilization have gone hand in hand. The emergence of mankind from savagery occurred when the first miller, regardless of anything save the pangs of hunger, plucked a primitive wheat berry from the stalk and, using his teeth for mill stones, ground grist for a customer who would not be denied—his stomach. Thence onward, taught forethought by dire experience, man planted and reaped his slender crop by the most primitive implements, and ground his poor stock of wheat in a rude mortar with a rock pestle, putting by his store of rudimentary flour against the time when need was sure to come. Then larger fields cultivated with clumsy, yet improving, tools and with greater crops following more intelligent handling. In time came the creaking wind-mill, and, step by step, the advance went on to the present era of crops unprecedented in the world's history for magnitude and quality, and mills with rank upon rank of steel rollers.




THE history of the wheat plant would even in a brief summary extend as far beyond the limits of this little book as the wheat plant itself has extended beyond the limits assigned to it on this continent half a century ago. Its origin has no exact date. Botanically it belongs to the grass family, and is, in fact, a modified form of grass. Our cultivated wheat has arisen from wild ancestors in Southern Europe and Asia. The Egyptians grew wheat on the banks of the Nile closely related to the wheat grown in Western Canada.\* A grain of wheat was found in a pyramid of which the date of construction is 3300 B.C. The Egyptians are believed to have derived their wheat from Mesopotamia. Grains of wheat have frequently been found in ancient Egyptian sarcophagi, and everyone has heard the stories of their having been planted and having germinated. No such story has ever been verified; and all scientific experiments with "mummy wheat" have failed to secure its germination. In ancient Egypt and Mesopotamia before they obtained metal to make sickles only enough wheat was raised to provide a small portion of the people with bread, which was therefore an article of luxury. The Egyptian loaves described by Herodotus were baked with leaven, and were circular and flat in shape, like crum-

\* Barley was extensively grown in ancient Egypt; its culture is believed to have preceded that of wheat. Besides serving the poorer classes for bread barley was used in ancient (as in modern) Egypt for making a kind of beer known in the Egyptian language as "booza," which word is said to have been brought by gypsies to England in Shakespeare's time and to have come down to our day in the form, "booze."

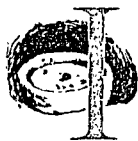


pets or muffins. They also made bread in the shape of modern rolls, sprinkled on the top with seeds. When the Israelites felt the pangs of hunger in the wilderness and longed for "the fleshpots of Egypt" they protested loudly to Moses, "We remember the fish which we did eat in Egypt, the barley, the cucumbers and the melons and the leeks and the onions and the garlic." It is evident from their list of grievances that they had not been accustomed to wheaten bread as a part of their regular food while they served as bondsmen in the land of the Nile; and further proof that bread was then an article of luxury is found in the part that it played in the religious ceremonies prescribed by the Mosaic law.

 THE Chinese, who seem to have a more or less valid patent on almost everything in modern use, modestly claim that wheat was grown in China some 2,700 years before the beginning of the Christian era. In the ruins of pre-historic dwellings in Switzerland three kinds of wheat have been found. In Hungary and in Lombardy wheat has also been found in pre-historic remains. It was cultivated in the stone age when man used flint implements, at a time when the mammoth and the rhinoceros flourished in Europe. Undoubtedly it has undergone many changes during the time it has been cultivated by man, but the fact that it claims a record of more than 4,600 years of faithful service to mankind is the best evidence of its sterling character and value as food.



PRIMEVAL man reduced wheat to flour by means of a hand-stone for thousands of years; this was the only form of milling in use. The grain was placed in a hollow stone and pounded into meal by means of a stone crusher. Aborigines in all countries used this simple process of milling. The first grinding mill was the saddle stone. This marked the initial step in the development of milling processes. It has been used throughout the world. The Greeks and Romans knew it, and it is still in use. The upper surface of the stone was made concave; in this hollow the grain was rubbed and ground by means of another stone. This was worked backward and forward, not rolled. Large numbers of these ancient saddle stones have been discovered and bear witness to the use to which they were put. The millers of Babylon, Nineveh, Assyria and Egypt used this process. Two limestone statuettes from tombs on the Nile near the pyramids of Saggarat show women engaged in grinding with the saddle stone. Both of these are of date about 2200 B.C. Six hundred years later, when Joseph become Pharaoh's administrator of grain supplies, the chief baker was imprisoned and subsequently hanged for producing bad flour. His grinding was done on the saddle stone. On this side of the Atlantic the aboriginal inhabitants were saddle stone millers, as their relics attest, and it is a remarkable fact that their saddle stones were greatly superior in shape and finish to any European saddle stone that has come down to the present day.



IN some countries the mortar was the contemporary, and ultimately the successor, of the saddle stone. The mortar was portable, and its great distinction was in being fashioned both inside and outside. The quern, an Italian invention of at least two thousand years ago, was the next step in the progress of milling. It was the first complete grinding machine in which the parts were mechanically combined, and succeeded loose stones. The quern introduced a circular motion, the upper stone revolving upon the lower. The saddle stone was a thrusting machine, the quern a revolving mill. This was the machine in use at the dawn of the Christian era. The familiar quotation: "Two women shall be grinding at the mill; the one shall be taken and the other shall be left," was translated in Wycliff's Bible early in the fourteenth century: "Iweine wymmen schulen ben gryndynge in o querne, oon schal be taken and the tother lefte." An early but important improvement in the quern was the grooving of the grinding face of the stone. The edges of the grooves performed the grinding and their hollows conveyed the meal to the rim of the stone; this was the rude initiation of the right principle of methodical furrowing, not fully developed until the era of water mills. The quern was the original British flour-mill. A little more than a century ago it was used in parts of the United Kingdom. It is still in common use in China and Japan. Mr. Richard Bennet in his History of Milling describes one he found in daily use at a secluded cottage near Drontheim, in Norway, in 1897. This quaint mill stood upon a table three feet high, a loose circular casing enclosing the stones, and the flour dropping through a hole into a drawer.

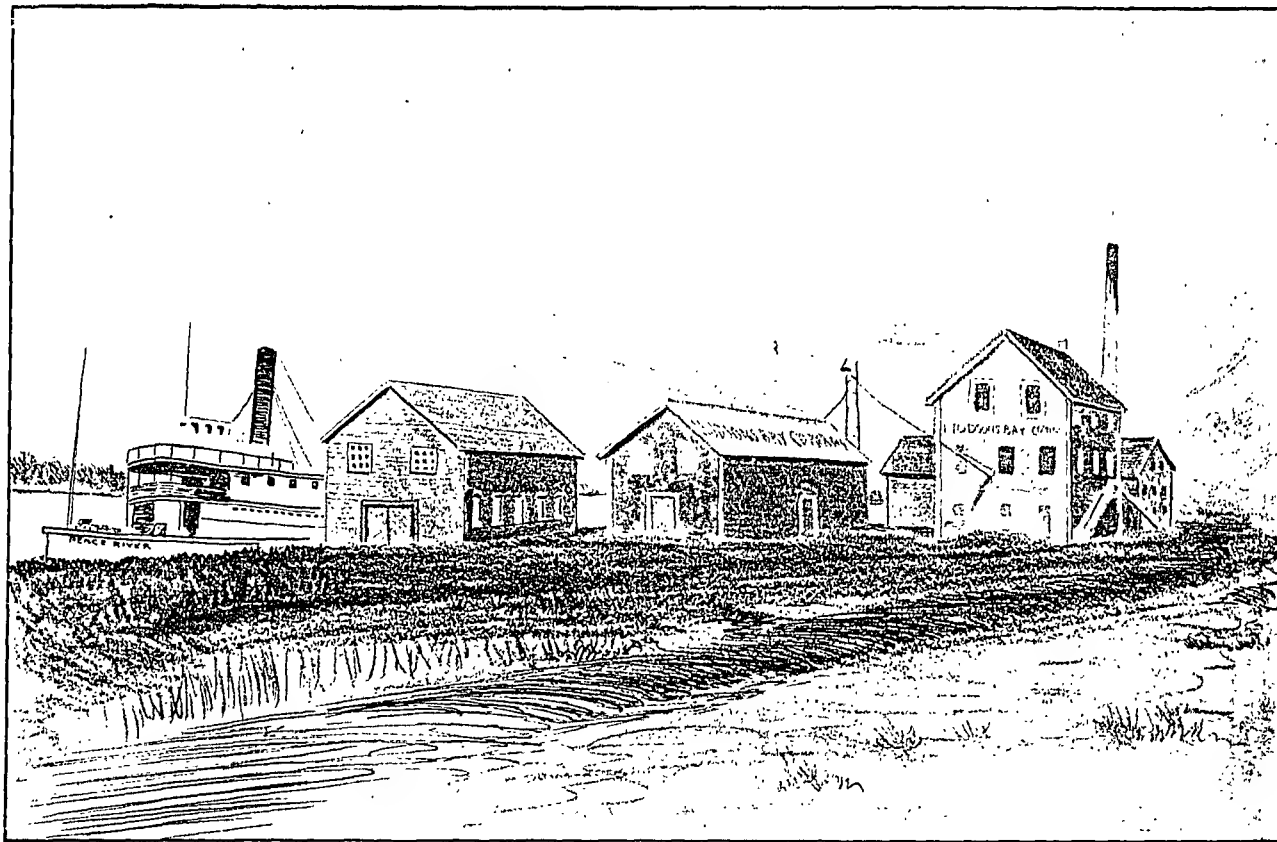


ORIGINALLY the woman was the universal miller, and supplied the power which drove the hand stone and the saddle stone herself. Then slaves, and later criminals, did the drudgery and grinding. The mills in operation in Pompeii, when it was destroyed in 78 A.D., as shown by remains discovered in its ruins, were slave-propelled. The cattle mills and slave mills were originally similar; the ass was ordinarily used for mill-driving, and for many years in Rome the human animals and their brute companions performed the flour-milling for the Eternal City. After the abolition of slavery in the fourth century, cattle mills were generally adopted. Tread-mills, worked by convicts, were in use in Europe as early as 1537 and are still in use in some countries—the sole survivors of the old Roman slave mills. The slave and cattle mill preceded the water mill. First the Greeks and then the Romans used water as power for grain grinding. The earliest allusions to the water mill, the world's first power mill, occur in writings from 85 to 65 B.C. The windmill came into existence much later than the water mill. A windmill tower of the Crusader period still exists in Syria. The year 1200 seems to be about the date that windmills were introduced into England. In 1784 the *Gentlemen's Magazine* announced that "a new discovery is now carrying into execution near Blackfriar's Bridge a method of grinding corn by means of a fire-engine, which communicates a power of working thirty-six pair of stones. This promises great profits, if the inventor can carry it into effect at a moderate expense." The engine was constructed by Boulton & Watt. Thus the steam-mill at last entered the milling field.



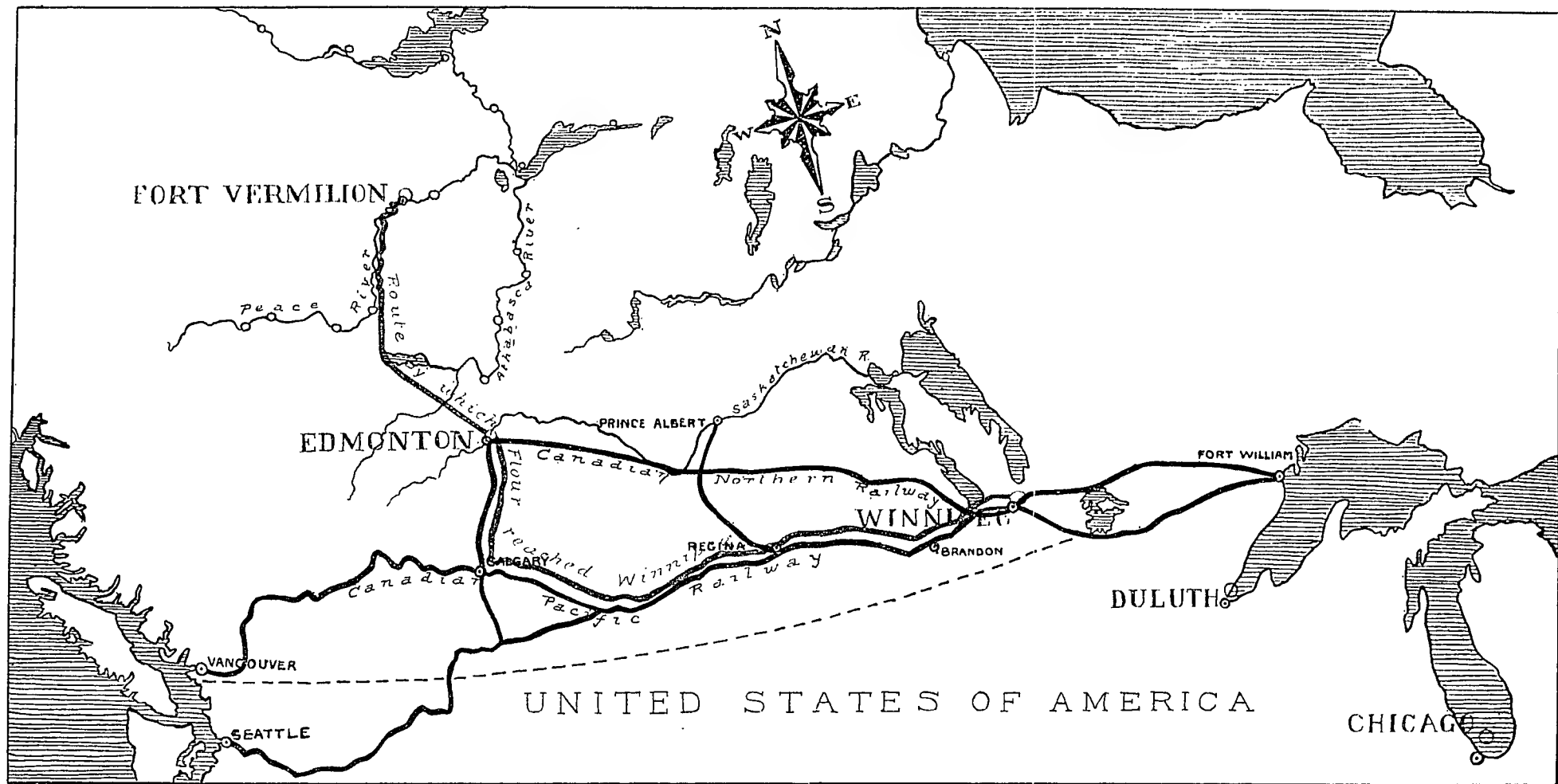
PECULIAR fact in connection with the development of milling is that to-day every type of mill known in the history of flour-making can still be found in active and practical operation in some quarter of the globe, so that the course of the various processes may be clearly traced by using actual modern examples. Some Indian tribes on this continent crush grain in pre-historic fashion; the saddle stone method, such as was used in the time of Abraham, is still doing duty in parts of Africa; in the Transvaal the pestle and mortar may be seen in common use; the quern may still be found in use in certain parts of Europe and Asia; the slave mill was but the prototype of the treadmill; mills driven by cattle are not unknown to-day; water mills, tide mills and windmills are still making flour in this era of giant roller mills. From the beginning down to the present day, the story of milling processes may be read by the curious in the devices and machines still in use and still doing the actual work of making flour for human food.

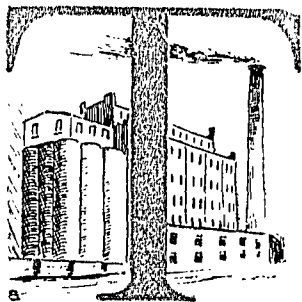




**THE HUDSON'S BAY COMPANY'S FLOUR MILL AT FORT VERMILION**

The northernmost mill on the continent. It grinds flour from wheat grown in the Peace River region, to supply the Company's far northern posts, and the settlers in the basins of the Peace and Mackenzie Rivers.





THE manufacture of flour, as it is understood in its largest sense to-day, is really a new industry both on this continent and in Europe; for it has been created since the introduction of new process milling, which alone made the operation of large flour mills possible, and this occurred only some thirty years ago. The saddle stone process was that of the individual or household miller; the advent of the quern and its improvements marked the beginning of manorial or village milling. With the mill stone came the grist mill, grinding for a larger district and exacting a toll from the farmers who brought grain to it, latterly developing in a moderate way into the merchant mill in some favorably located spot. Essentially, the mill stone era was the grist mill period. This was swept away almost entirely except in the more isolated rural districts, by what is called the "revolution in milling," which first brought the purifier into use and soon after substituted chilled iron rollers for the long used mill stones, thereby enormously increasing the output of the plants, creating the modern large mill, with its traffic extending to remote markets at home and abroad, and relegating the grist mill to complete obscurity and disuse. With the change came the present race of merchant millers, as distinctly different from the typical grist miller of the mill stone period as he was from the quern miller or as the last named was from the slave miller of Roman days. So recent was the dawn of the new milling era that millers who saw it are still in their prime.





“FOR the first seventy years of the last century,” writes William C. Edgar, “the development of milling processes, especially in America, was so slow as to be almost imperceptible. The trade was getting ready for a radical and astounding change, such as few industries have ever known.

This reform was to sweep everything before it in its stern and unexpected onslaught, to overwhelm all opposition, ruin those who stubbornly clung to old ways, to enrich those who were alert and progressive, break down all barriers, divert established trade channels, open up new fields for grain growing, utilize opportunities which had long lain dormant, effect a complete change in the industrial map of the North American continent, build railroads, create new routes to the old markets, immensely cheapen the bread of the Old as well as the New World, drive out of commission in Britain and America thousands of time-honored, old-fashioned mills unable to compete in the new order of things, and bring into being flour mills of a capacity such as the world never dreamed of.”



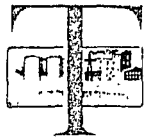
THE introduction of the purifier in Minnesota in 1870 was to milling what the introduction of the reaper was to agriculture. No other one machine has accomplished what it did for the world's bread-eaters. About the time of its introduction good flour sold for \$10 or more a barrel. The average price for flour in these days is about one-third of its average then. The purifier itself did not reduce the cost of making flour, but it enabled the miller to grind from the hitherto despised spring wheat, which immediately commanded a price equal to that of

the best winter wheat flour. This gave a great impetus to milling, increased the demand for spring wheat, rendered valuable the crops of Minnesota and Dakota and Western Canada, and led to the agricultural development of this vast section of the continent. Spring wheat flour sprang into favor in America, and when introduced abroad, especially in the United Kingdom, won its way against all competition. In the end the demand for it caused British millers to re-model their mills and grind a mixture of home-grown wheat and wheat from the northern part of this continent. To Edmund Le Croix, a native of France, belongs all the honor and credit of introducing and building the first purifier on this continent; the poor man received nothing else from the machine which made untold millions for others and changed the industrial future of the north-western section of this continent. He was an educated Frenchman, but unaccustomed to business ways, and lacked a knowledge of the English language. Had he been shrewder and more suspicious he would not have allowed the fruit of his work to escape him, and he might have obtained some of the millions which went to others as a result of his experiments. The history of the purifier is an unwritten industrial romance. Fragments of it have been told, but the entire story, abounding in dramatic facts rivalling fiction, awaits the coming of a comprehending novelist to weave it into a tale of absorbing interest. It is a story of the stealing of inventive ideas, of the securing of patents by those not rightfully entitled to them, of long and costly litigation, of the death of Le Croix, broken-hearted and poor, and years afterwards of the death of the man who appropriated Le Croix's inventions, and, after attaining immense wealth, came to disaster.



ON May 2nd, 1878, a fire in the "Washburn A" mill at Minneapolis caused an explosion of flour dust, which completely destroyed the most important of that great group of mills, with the loss of a number of lives.

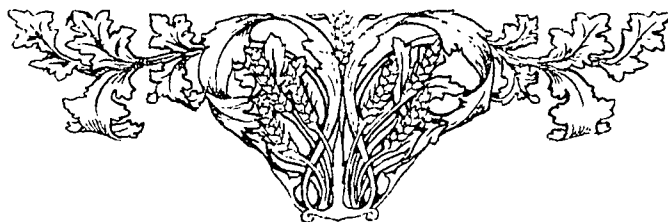
Dust collectors had not then been invented and the busy mills were filled with a fine dust, which, under certain circumstances became as inflammable and destructive as gun powder. To this was due the catastrophe which temporarily checked the growth of the Minneapolis milling industry. The morning after the disaster the work of re-building the destroyed plants was begun. Unaware that another great change in mill methods was impending, and that the days of the old and tried mill stone were numbered, the owners equipped the rebuilt mills with stones for grinding. Some time before this rollers had been introduced on this continent by Edward P. Allis & Company, mill builders, whose mill engineer, Mr. William D. Gray, had planned and built some of the most important mills in the United States. At first these rollers were of marble but later of porcelain imported from Zurich. At the time of the rebuilding of the Minneapolis mills the roller process, which soon succeeded the mill-stone, was considered altogether too experimental for practical use. Governor Washburn during his foreign travels, had seen the rollers at work and from curiosity had ordered a few sets. These had arrived at Minneapolis, but were still unpacked. He contracted with Mr. Gray in 1878 for a small experimental roller mill; this was the first complete roller mill in the United States, Chilled iron rollers soon succeeded those of porcelain; and this type of grinding machine then began to displace the mill-stone throughout the milling world.

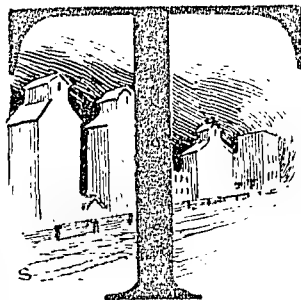


THE substitution of rollers for mill-stones was the most radical change ever made in the science of milling. It is claimed by the Hungarian millers that the millers of this continent appropriated their methods and that to the millers of Budapest belongs the credit of having been the first to adopt the roller process of making flour. It is not claimed by the millers of this continent that the roller mill was invented by them, nor can they deny that stone rollers were in use in Hungary before they were adopted on this side of the Atlantic. It is claimed, however, that the system in use on this continent was neither invented nor first used in Budapest. The Hungarian roller mill millers claim that the first roller-mill plant was installed in Budapest in 1874; that rollers were shipped by them to Minneapolis in 1878, to Switzerland, the United Kingdom, and Russia three years earlier, and to France in 1876. But the Farrell Foundry of Ansonia, Conn., entered an order on September 21, 1874, for chilled iron rollers for George H. Christian and Company, of Minneapolis. However, in seeking the origin of the type of rollers now in universal use one must go back fifty years earlier. Unquestionably the inventor of the roller mill was Helffenburger, who in 1820 built and experimented with the first roller mill at Rohrschach, in Switzerland. This, however, was never developed by him. Jakob Sulzberger, of Frauenfeld, Switzerland, invented the first successful system of grinding with rollers. His mill was built in 1832 and started in 1833, and was an immediate and complete success. The honor of the invention, as well as the practical adaptation of chilled-iron rollers for making flour, belongs unquestionably to Switzerland.



URING the early 'eighties rollers rapidly succeeded the mill stones, in all the principal mills in Canada and the United States, and soon became the standard for new and modern mills the world over. The mill-stone had served its allotted time, and was retired with high honors and pleasant memories. It is now hopelessly obsolete, except in remote districts into which the latest milling inventions have not penetrated; these are few and far between in the milling sections of this continent. Following the purifier and the roller came a train of useful inventions which were incorporated in the roller system of milling—dust collectors, scourers, bolters, separators, sifters and other machines. After the radical changes incident to the revolution in milling, the progress of the trade has been in the direction of minor improvements and a close attention to economy in the cost of production, made necessary by the most intense competition and the reduction of profits to a minimum; and on this continent the geographical direction of the growth of milling capacity, like the movement of the production of high quality wheat, is northwestward.





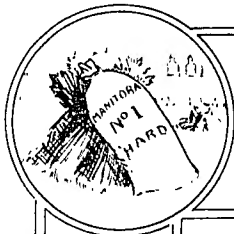
THE world's wheat crop for the last three years has been as follows: in 1904, 3,147,627,000 bushels; in 1905, 3,316,125,000 bushels; and in 1906, 3,423,704,000 bushels. In its international character as the world's food, wheat comes to a final reckoning in the markets of Great Britain. There the world's wheat crops pass in review. It is a great clearing house in which the balances of the wheat-growing countries are adjusted. Other countries are importers of wheat,

some of them require large quantities regularly, some of them are intermittent bidders for a portion of the world's crop, but the United Kingdom is a steady and ready purchaser of wheat and its products, a country of wheat-bread eaters, raising always much less than it consumes, and with characteristic resourcefulness ready at a moment's notice to pay in good red gold for what it needs. The main contributions to the totals of the world's wheat crop for 1904, 1905, and 1906, given above, have been as follows:

	1904	1905	1906
United States . . . . .	735,261,000	692,979,000	552,400,000
Canada . . . . .	131,614,000	113,441,000	75,213,000
European Russia . . . . .	450,000,000	568,337,000	622,337,000
Total for Europe, including Russia..	1,825,608,000	1,802,662,000	1,744,844,000
Asia . . . . .	444,786,000	420,602,000	475,468,000
Africa . . . . .	48,404,000	39,070,000	50,496,000
Australia . . . . .	77,694,000	65,626,000	84,628,000
South America, including Argentina	155,337,000	176,745,000	155,185,000



F 131,614,000 bushels of wheat grown in Canada in 1906, 94,201,984 bushels were grown west of the Great Lakes, on 5,063,800 acres, out of the total area of 173,318,862 acres in Western Canada, west of the Red River, capable of producing wheat. Taking the wheat areas on all the continents into view, we find that nature has arranged a wheat calendar whereby during every month of the year somewhere on the earth's surface a crop of wheat is harvested, modern transportation systems supplying the connecting chain which keeps the world from growing hungry. The world's harvest times are as follows:—In January, Australasia, Chile, and Argentina; in February and March, East India and Upper Egypt; in April, Lower Egypt, Asia Minor and Mexico; in May, Algeria, Central Asia, China, Japan and Texas; in June, Turkey, Spain, Southern France, California, Tennessee, Virginia, Kentucky, Kansas, Utah, Missouri; in July, Roumania, Austria-Hungary, Southern Russia, Germany, Switzerland, France, Southern England, Oregon, Nebraska, Southern Minnesota, Wisconsin, Colorado, Washington, Iowa, Illinois, Indiana, Michigan, Ohio, New York, New England; Eastern Canada; in August, Holland, Belgium, Northern England, Denmark, Poland, Western Canada, the Dakotas; in September and October, Scotland, Sweden and Norway, Northern Russia; in November, Peru and South Africa; in December, Burmah and Argentina. Thus, the year round, seed-time and harvest succeed each other, and somewhere the wheat is always coming into the market.



## The Manitoba Free Press

HAS MARKED THE  
CHRISTMAS SEASON IN PREVIOUS YEARS  
BY THE PRESENTATION

In 1901—On a miniature sack of No. 1 Hard Manitoba Wheat

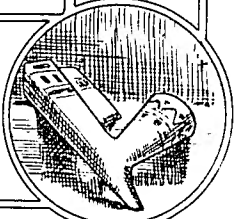
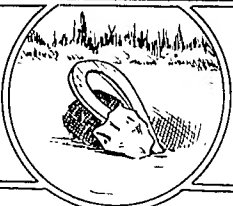
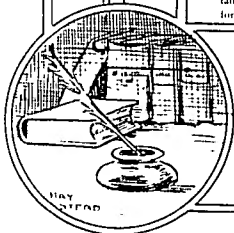
In 1902—On a miniature sack of Rendev's Penning made at Fort McPherson a Hudson's Bay Company post, sixty-five miles within the Arctic Circle, and 2978 miles northwest of Winnipeg, accompanied by an illustrated booklet bound with a deerskin thong

In 1903—On a Gopher's Tail mounted as a good luck bringer, accompanied by an illustrated booklet containing the Cree legend of the gopher given in print for the first time

In 1904—On a pen made from a quill of a Canada Wild Goose, with an illustrated booklet containing the Cree legend of the Wild Goose given in print for the first time

In 1905—On a Chief and Stool with an illustrated booklet containing the Cree legend of the origin of this set forth in print for the first time from a manuscript journal of an officer in the service of the Hudson's Bay Company, dated in the year 1817

In 1906—On a Pipe of Peace with an illustrated booklet containing certain Indian legends of the origin of the Calumet, and some account of the usages in connection therewith





# Winnipeg

## THE CAPITAL OF THE PROVINCE OF MANITOBA AND COMMERCIAL METROPOLIS OF WESTERN CANADA

Population, 1907 .....	111,729
Total Assessable Property, 1907 .....	\$3,825,960
Rate of Taxation, 1907 .....	16
Building Permits, 1907 (11 months).....	6,291,000
Local Improvements, 1907 (10 months)...	\$50,000
Area, in acres, 1907 .....	12,990
Area of Public Parks, 1907 (acres).....	516

### GROWTH OF POPULATION.

1874 (year of incorporation)...	1,869
1885 .....	19,571
1898 .....	39,384
1902 .....	48,411
1903 .....	56,741
1904 .....	67,262
1905 .....	79,975
1906 .....	101,057
1907 .....	111,729

### GROWTH OF ASSESSMENT.

1901 (real and personal property).....	\$26,405,770
1902 .....	28,615,810
1903 .....	30,373,400
1904 .....	48,214,950
1905 .....	62,727,630
1906 .....	80,511,725
1907 .....	\$3,825,960

### BUILDING PERMITS.

No. of Buildings		Value.
1901.....	796.....	\$1,708,557
1902.....	972.....	2,408,125
1903.....	1,593.....	5,689,400
1904.....	2,268.....	9,651,750
1905.....	4,099.....	10,480,150
1906.....	4,176.....	12,760,450
1907..... 11 months	2,787.....	6,291,000

### LOCAL IMPROVEMENTS

1901 .....	\$327,029
1902 .....	357,201
1903 .....	469,394
1904 .....	432,689
1905 .....	307,893
1906 .....	1,071,633
1907 (10 months) .....	\$50,000

### BANK CLEARINGS

1901 .....	\$106,956,720
1902 .....	188,370,002
1903 .....	246,108,006
1904 .....	294,601,137
1905 .....	369,868,179
1906 .....	504,585,914
1907 (11 months).....	540,487,159

### CUSTOMS RETURNS

1901 .....	\$ 975,880
1902 .....	1,492,469
1903 .....	1,936,811
1904 .....	2,601,252
1905 .....	2,705,051
1906 .....	3,620,072
1907 (9 months, to March 31) .....	3,144,551

### INLAND REVENUE RECEIPTS

1901 .....	\$ 537,958
1902 .....	637,881
1903 .....	775,783
1904 .....	914,189
1905 .....	1,000,685
1906 .....	1,148,723
1907 (9 months, to March 31st) .....	1,027,632

# Rural Western Canada

## THE BREAD BASKET OF THE BRITISH EMPIRE

Length .....	miles 1,300
Breadth .....	" 400
Area .....	acres 550,000,000

### ACREAGE UNDER CULTIVATION, 1907

Wheat .....	5,630,800 acres
Oats .....	2,322,616 "
Barley .....	529,160 "

Total ..... \$,482,606 "

### YIELD OF WHEAT BY YEARS.

1902 .....	67,931,117 Bushels
1903 .....	56,116,927 "
1904 .....	54,390,678 "
1905 .....	84,175,226 "
1906 .....	94,291,981 "
1907 (estimated) .....	62,000,000 "

### ELEVATOR CAPACITY.

	Bushels
C.P.R. Winnipeg and Thunder Bay.	
Lake Superior .....	11,625,000
C.N.R. Winnipeg and Thunder Bay.	
Lake Superior .....	7,000,000
C.P.R. West of Winnipeg .....	28,538,200
C.N.R. West of Winnipeg .....	7,485,000
Alberta Railway & Irrigation .....	209,000
Midland Ry. Co. and Brandon, Sask.	
& Hudson Bay Ry. ....	365,000
Total .....	55,222,200

### FLOUR MILLING CAPACITY.

	Bbls. per day.
Winnipeg to Thunder Bay, Lake Superior	19,500
West of Winnipeg .....	18,565
Total .....	38,065

### AVERAGE YIELD OF WHEAT PER ACRE FOR TEN YEARS.

Western Canada .....	18.95 Bushels
Minnesota .....	14. "
Kansas .....	12. "
Missouri .....	11. "
North Dakota .....	12.4 "
South Dakota .....	10.9 "

### RAILWAYS.

Canadian Pacific mileage .....	5,896
Canadian Northern Railway mileage....	3,186
Grand Trunk Pacific Railway mileage	
(projected to be constructed by 1911) ..	3,000
Already completed .....	415
Great Northern Railway mileage .....	311

### IMMIGRATION INTO WESTERN CANADA.

Year ending United	Other	
June 30th	States	British Countries Total
1901 .....	17,958	11,810 19,381 49,119
1902 .....	21,672	17,259 28,448 67,379
1903 .....	47,780	41,787 38,797 128,364
1904 .....	43,172	50,915 36,242 130,328
1905 .....	43,513	102,723 146,266
		British and Other
		Countries
1906 .....	57,796	131,268 189,061
1907 .....	56,518	195,520 252,038

## FACTS ABOUT

# The Manitoba Free Press

Winnipeg

### Growth of Circulation

#### Sworn Average Circulation of the Daily Free Press

1901 .....	13,862
1902 .....	15,341
1903 .....	18,821
1904 .....	25,693
1905 .....	30,018
1906 .....	31,559
1907 (11 months) .....	36,970

#### Sworn Average Circulation of the Weekly Free Press and Prairie Farmer.

1902 .....	10,672
1903 .....	13,640
1904 .....	15,801
1905 .....	15,654
1906 .....	21,300
1907 (11 months) .....	23,798

#### Volume of Advertising carried by the Daily Free Press.

	Lines. Display.	Lines. Classified.	Total. Lines
1905 .....	5,820,450	2,192,625	8,013,075
1906 .....	6,067,050	2,717,625	8,784,675
1907 (11 months) .....	5,791,950	2,785,650	8,487,600

### Press Capacity

The figures given represent the number of 16-page papers which can be printed in an hour.

1900 (Cox Duplex, limit 8 pages) .....	4,000
1901 (Hoe Pony Quad) .....	10,000
1902 .....	10,000
1903 .....	10,000
1901 (Hoe Pony Quad and Full Quad) ..	34,000
1905 .....	31,000
1906 (Hoe Quad and Hoe Sextuple) ....	60,000
1907 (Two Hoe Sextuples) .....	72,000

#### Paper Consumption by the Manitoba Free Press Co.

1899 .....	550,000 Pounds
1900 .....	644,640 "
1901 .....	999,217 "
1902 .....	1,290,492 "
1903 .....	1,972,098 "
1904 .....	2,791,356 "
1905 .....	3,575,704 "
1906 .....	1,160,398 "
1907 (11 months) .....	1,390,508 "

The Daily Free Press covers the City of Winnipeg more thoroughly than any other city in America is covered by one paper, while the combined use of the Daily Free Press and the Weekly Free Press and Prairie Farmer gives the advertiser greater publicity in Western Canada than any other medium or combination of mediums which he might employ.

The Free Press does business on the basis of a uniform flat rate, and hence is an ideal medium for an advertiser who approaches Western Canada for the first time and wishes to conduct an experimental campaign.